

slower than the Wagtails. Where they have chosen their home, they select a certain stone, bush or post, where the male has his observation point and when danger approaches either flies rapidly and easily away, or drops like a rocket into the grass. Curiously enough they really have no true song, but only a few monotonous notes, yet the Fallow Pipit is an attractive bird. Especially in the region in which he lives he gives a charm to many a desolate waste or rough rocky hill, where no other creatures seem to thrive. Of all the Pipits he is the best nest builder, and while his nest is bulky it is yet the most difficult to find as each pair has a rather large territory. I never was lucky enough to find the nest, but have heard and read that it is well made and finely lined, containing five eggs, which are white, densely covered with reddish minute spots, varying considerable in size but little in color. He is one of the first birds to leave Germany; in August he starts for the south, traveling by day and by night in small companies, quietly, scarcely noticed by any one, just as his whole life is little known to any one but the forester or ornithologist, who seeks him in his barren home.

THE YELLOW-THROATED VIREO.

(*Virco flavifrons*.)

BY J. WARREN JACOBS, WAYNESBURG, PA.

One of the most interesting little birds with which I have become acquainted is the Yellow-throated Vireo. Much of my enthusiasm is due, perhaps, to the fact that they so successfully spirited away their little moss-like hanging-basket, that my efforts to reveal it were futile, for a number of years, until after the young had flown. Repeated search, however, was rewarded by the finding of a nestful of fledglings, which blinked at me from the brim of the nest, and showed every

indication of scrambling over if I dared approach nearer than the base of the branch from which the heavy laden basket was swinging.

My knowledge, thus far, seemed to show that these birds choose for a nesting-site, trees along the border of a wood on high ground; and accordingly, when their notes were heard issuing from the forest, I examined the outspreading branches of the trees nearest the open, but usually without success. Failure to find occupied nests, and the presence of the birds in moderate numbers during the breeding season, assured me that I erred in the belief that they always nested on the border of a wood; so I determined to make a more thorough investigation.

It was on the 9th of May, 1897, that, while searching for a nest of the Louisiana Water-Thrush in a wooded ravine, a little Yellow-throated Vireo darted past me and alighted on the trunk of a tree only a few feet away. Thinking food, in the form of mosquitos, ants or like insects, was its errand, I watched its movement; but almost before I could realize it, the little creature had snatched up a flake of lichen and was away like the flash which marked its arrival. Returning from the same direction it flew to some ferns and nettles. I moved down the ravine and stationed myself where I could see out of the deep recess into the little valley through which a brook gurgled. Soon my little friend came flashing down the ravine, and passing overhead went direct, with an upward bending of flight, to the upper part of a large white oak on the side of the little valley and directly opposite the ravine from which she had just flown. My glass soon discovered the nest, far up among the branches, and both old birds working upon it. The nest seemed to be about completed, as they were putting on the finishing touches—lichen and bits of cocoon-silk on the outside, and fine shreds of bark on the inside.

On the 18th, the growing leaves had completely hidden the nest, and the only way it could be located was to ascend the tree and search for it. It was finally discovered sus-

pended from a forked twig, 55 feet above the ground, with the old bird sitting upon it. She left only when I approached within a few feet of her.

The nest was composed of fine grass, shreds of weed fiber, vegetable and silken substances, and wooly materials; and was lined with fine shreds of bark. The outside was made very beautiful by adornment with little white cocoons, flakes of lichen and some pieces of white pulpy wood.

The four fresh eggs retain, to this day, the delicate pinkish tint which they possessed before being blown, and are the most richly marked eggs of the Vireo I have ever seen. The markings, which are of lavender, chestnut, and vinaceous-cinnamon, are bold and quite heavily seated, chiefly on the larger end of the egg, where a broken wreath is discernible. In shape they range from ovate to elliptical ovate and measure: .82x.57, .78x.54, .76x.54 and .75x.56 inch.

Four nests which I carefully measured, show but slight variation in size, the average being as follows: outside diameter, 3 inches; inside diameter, 2 inches; outside depth, 2.5 inches; inside depth, 1.6 inches. Their height from the ground ranged from twelve to fifty-five feet, the average being thirty-two feet. Two of the nests were in oak trees, one in a maple and one in a hickory tree; the situation being at random throughout forest or high ground.

A nest found on May 30, 1897, had a long black hair interwoven with the fine grass lining. Besides the four eggs of the rightful owner, there were two of the Cowbird's in this nest.

A very peculiar find was a nest secured on May 26, 1898. Beneath and almost hidden by the lining was an egg of the Cowbird. I preserved this nest with the parasite egg remaining where the vireos decided it should rest. While I was securing this nest the old bird sat quietly until I detached the limb and pulled it in where the nest could be reached.

Among my records on composition of nest, I find "oak catkins" and tops of "tumble grass" mentioned as entering in the construction.

I have had the opportunity to make a careful study of a series of six normal sets of this species, numbering twenty-two eggs. Three distinct types of coloration are noticeable in comparing the various sets; the ground running from a pure white to a creamy or pinkish tint, marked more or less with lavender, ecru drab, vinaceous—or vinaceous cinnamon,—chestnut, and black; on some the lighter and on others the darker shades predominating. The markings on one set are almost wholly black; on another, vinaceous; and another has a preponderance of lavender. The contour is either ovate or elliptical ovate, and the average measurements of the twenty-two eggs is .81x.58 inch; the largest being .87x.62 inch and the smallest .75x.54 inch.

NOTES ON THE WINTER BIRDS OF WAYNE COUNTY, MICHIGAN.

BRADSHAW H. SWALES.

Since 1890 I have been interested in recording the various species of birds that either remain throughout the winter or appear casually as stragglers. To me this winter bird study has been both interesting and profitable. A tramp through the fields or the woodlands during the winter months possesses a zest in many respects that the balance of the year does not afford, as the bracing air and lack of insect pests more than offsets the cold and the wet. The following list made during the months of December, January, and February is, of necessity, incomplete as I have had neither the time nor opportunity to observe the winter ducks and have had but a limited time in the field. However, the number of species observed is no mean list for the so termed birdless winter, and I will take pleasure in adding to the same in the coming winter if possible.